

2. Review of Previous Studies

The Northwest Valley transportation needs have been heavily studied over the past ten years. Various mode-specific and route-specific analyses have been done to assess the best way to address the rapid growth in the area. Each study appears to reach slightly further into the future as plans for the Northwest area communities change, generally to higher levels of development. For purposes of understanding, the various products have been grouped into five categories based on their modal emphasis: general, highways, transit, bicycle/pedestrian and goods movement. The summaries of the various studies are presented in Appendix 1. Table 1 shows the salient points from each study reviewed.

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General

Some studies cover a multimodal or non-transportation subject matter. These have been grouped and summarized in a “General” category. Among the studies in this category are the MCDOT Northwest Area Transportation Study and White Tank/Grand Avenue Area Plan, both of which covered much of the same area as NWATS. Though the horizon timeframe was different, the

underlying data was based on an earlier generation of the MAG model and the study area was confined primarily to the urbanized portion of the Northwest, the results may offer insights into the regional issues facing the area. At the same time, the Regional Congestion Study and the External Travel Survey begin to shape an understanding of some of the areas requiring improvement in the short term.

Studies Reviewed

- MAG FY 2002-2006 Transportation Improvement Program
- MAG Long Range Transportation Plan 2001 Update
- 1998 Regional Congestion Study
- MAG External Travel Survey
- MAG Desert Spaces
- MCDOT White Tank/Grand Avenue Area Plan
- MCDOT Northwest Area Transportation Study
- ITS Strategic Plan Update
- Transportation Elements of Municipal General Plans in Buckeye, Glendale, Peoria, Phoenix, Surprise and Wickenburg

Highways

Grand Avenue has been studied many times over the years. Its diagonal alignment across the highway grid system in the Northwest Valley and the parallel BNSF Railroad present many challenges that do not lend themselves to easy solutions. Only now, after years of discussion about strategies, are options being fully explored to address the unusual nature of the roadway and its significance in the area highway network. The latest reports propose the construction of grade-separated overpasses at critical locations to expedite traffic on Grand or one of the primary cross-

streets. The first of these projects is now underway at Thomas Road. Others will follow as funding becomes available.

Loop 303 is the topic that claims the broadest interest among Northwest Valley residents and businesses. The configuration, not the existence of the roadway, is the greatest question. Many would prefer a freeway type facility while others want a “parkway” that they perceive would limit heavy trucks and have less impact on adjacent properties. As things are, the travel demands in the growing area may require as much capacity as possible. The issue will be how to accomplish that with minimal negative environmental impacts.

The longstanding issue of an alternative route for commercial vehicles in Wickenburg continues to defy a widely acceptable and fundable solution. The impact of heavy traffic on the downtown has become more and more difficult to manage for the historic community. With traffic growth between Phoenix and Las Vegas, it begs the identification, once and for all of a route that can serve heavy vehicles. The alignment of the CANAMEX Corridor is viewed by Wickenburg officials as holding significant promise in their effort to remove heavy vehicles from the downtown environment while preserving local economic vitality.

Studies Reviewed

- Grand Avenue Major Investment Study
- Grand Avenue NW (Loop 101 to 303) Corridor Study
- Wickenburg SR 60/US 93 Realignment – Corridor Location Report
- 1996 Roads of Regional Significance
- East-West Mobility Study
- Bottleneck Study

Transit

There is still little transit service in the Northwest Valley. Most cities are beginning to recognize the need for alternatives as they grow, but funding has not as yet followed that realization. Only Phoenix and Glendale have dedicated sources of revenue for transit development and operation. Others, with more limited sources of revenue, are looking for a regional solution that would fold their needs into a regionally integrated plan.

Given this, studies (e.g., city transit plans) have been done by those communities that would like to establish a structure for future transit development. Surprise and Peoria have recently adopted transit plans into their General Plans and are using them in decisions related to new development projects in their areas. With RPTA’s help, Surprise is investigating an interjurisdictional proposal with some of its neighbors to offer a subregional circulator service among important local destinations. Glendale has the most well developed plan after Phoenix, but overall there has been limited regional vision about transit as part of anticipated growth plans and as a true travel choice in the future of the area.

Studies Reviewed

- Peoria Transit Plan
- Surprise Transit Plan
- Glendale Transportation Plan
- MAG Park and Ride Lot Study

Bicycle/ Pedestrian

The West Valley Rivers Master Plan is an ambitious program that calls for participation from many of the Northwest Valley cities. It will result in an extensive recreational amenity for the area when complete and will tie east and west Valley trails together. The new system can serve many needs, including some limited commuting and shopping given

its location in the New River and the Agua Fria River.

On the other hand, there is less information about “in town” bicycle programs. Again, Glendale and Phoenix have well-developed plans and are moving to implement them, but other cities have not yet been able to make that kind of commitment to bicycle mobility.

Studies Reviewed

- 1995 Pedestrian Area Plan Design Guidelines
- 1999 Pedestrian Plan Summary
- Bicycle Plan 1999
- West Valley Rivers Master Plan

Goods Movement

MAG and ADOT jointly initiated a study in late 1999 to develop a recommendation for the routing of the CANAMEX Corridor through the MAG region. The MAG Regional Council approved the recommendation for the corridor in April 2001. The alignment selected was at the western edge of the Valley included I-8, SR-85, I-10, and an alignment in the general vicinity of Vulture Mine and Wickenburg Roads connecting to the Wickenburg Bypass.

The ITS/CVO Business Plan was a review of ITS policies that would aid the commercial vehicle industry and help to mesh CVO traffic control and guidance practices with other ITS efforts underway at ADOT, Maricopa County and MAG.

At present, within the MAG region, most trucking is to and from sites within the Phoenix Metro area, and not attempting to bypass it. Many of those destinations are distribution centers along I-10 in Tolleson and Avondale. This pattern could change in the future, for example if major distribution centers move from their central urban locations to ones on the periphery of the urban center if lower costs can be achieved that way.

MAG Intermodal Study was to give people choices so they can select which mode or modes of travel that best meet their needs. In particular, the project’s goals were to enhance the capability of transportation facilities, whether public or privately owned to provide for the most efficient, cost-effective and least environmentally harmful means of traveling from place to place. In order to accomplish this, the intermodal system was defined as providing the greatest number of reasonable choices that enhances the connectivity between modes as well as increases the coordination among transportation-related decisions.

Studies Reviewed

- ITS-CVO Business Plan
- MAG Intermodal Management System Study
- Compilation of Evaluation Data for Designation of the CANAMEX Corridor through the Maricopa County Region

Table 1: Related Studies Summaries Review

Report or Study	Date	Jurisdiction	Summary
General			
MAG Transportation Improvement Plan 2002-2006	July 2001	Maricopa Association of Governments	Reflects five-year funded transportation capital improvement program for the region
MAG Long Range Transportation Plan 2001 Update	July 2001	Maricopa Association of Governments	Currently adopted long range transportation plan covering all modes and anticipated funding based on a trend assumption of regional and local funding sources.
Regional Congestion Study	September 2000	Maricopa Association of Governments	While not including the entire Northwest Valley, this study focuses on those cities immediately adjacent to the I-17/I-10 corridors, and the SR 101 corridor. Peak hour travel congestion is detailed in the study, as well as the level of service of the freeway segments within this study.
Phoenix Area External Travel Survey	March 5, 2001	Maricopa Association of Governments	This survey was performed as part of the MPO responsibility to maintain the regional travel demand forecast model. In regard to the Northwest Valley Study Area, four survey stations were established to survey motorists concerning their respective origin-destinations of their trips. Both Internal-External and External-External trips were surveyed and tabulated. The results were that 46% of all trips in Maricopa County were Internal-External.
Desert Spaces Plan	April 1995	Maricopa Association of Governments	The concept plan provides a framework for Northwest Valley jurisdictions regarding land use planning and preservation and conservation of open spaces. Specifically mentioned, are the Aqua Fria and New Rivers as recreational trails to link with major roadways and residential developments. The White Tank Regional and Thunderbird Parks are also detailed on how regional bikeways, pathways and trail system could link these recreational destinations and tie into the regional roadway network to provide transportation linkages.
Desert Spaces: Environmentally Sensitive Development Areas Policies and Design Guidelines	June 2000	Maricopa Association of Governments	This follow-up study to the Desert Spaces Plan provides a land use policy framework for Northwest Valley jurisdictions when planning new developments near environmentally sensitive areas. Included are specific considerations such as, pedestrian friendly development design, transit-oriented design and recreational trails to link to regional parks and river course ways.
White Tank/Grand Avenue Area Plan	2000	Maricopa Association of Governments	The goals and objectives in this plan provides the benchmark in three-dimensional sub-regional planning incorporating quality of life enhancements by recommending alternate mode transit planning to reduce congestion within the Northwest Valley. Benefits such as coordinated planning between public and private agencies and developers to encourage alternate modes in new development design and transportation improvements.
Northwest Valley Transportation Study	2000	Maricopa County DOT	Study assessed transportation needs for all modes in the Northwest part of urbanized Maricopa County.
MAG ITS Strategic Plan Update	2001	Maricopa Association of Governments	The Strategic Plan was undertaken to define the future structure, planning and programming needs and responsibilities for ITS in Maricopa County following the success of the FHWA Model Deployment Initiative (AzTech). The plan recommends: 1) specific architecture objectives to ensure compatibility among jurisdictions, 2) a telecommunications plan that would move away from leased lines in favor of a WAN for ITS, 3) establishing MAG ITS Committee as the guidance and regional champion and 4) lays out a series of implementation strategies to ensure interjurisdictional coordination and compatibility.
Buckeye General Plan	1989	Town of Buckeye	The General Development Plan is a statement of the Town of Buckeye's community goals and development policies. It is to be used by the Town Council as a decision-making guide for the physical development and redevelopment of the Town. The General Development Plan offers community goals and objectives indicating how the Town would like to develop in the foreseeable future.
Glendale Transportation Plan	2001	City of Glendale	The Glendale Transportation Plan is a guide for the development of transportation in the Glendale Planning Area for the years 2000 through 2025. Current conditions and future prospects are addressed with plans for each mode of transportation.
Peoria General Plan	2000	City of Peoria	The Peoria General Plan presents goals, objectives, and policies which identify Peoria's priority for land use and development.

Phoenix General Plan	2001	City of Phoenix	The Circulation element of the General Plan discusses how to reduce the rate of increased traffic congestion, which is increasing faster than population growth. According to the General Plan, Phoenix needs to promote more alternatives to driving alone and to decrease the number and length of trips.
Surprise General Plan	2000	City of Surprise	The objective of the Transportation/Circulation element of the General Plan is to ensure that residents and visitors have a safe, efficient, effective, and convenient multi-modal transportation system. The system provides internal efficient travel connections while providing access regionally. The Transportation/Circulation element strives to complete the grid system. It is a priority to restrict developers from inhibiting construction of arterial roadways along section lines.
Wickenburg General Plan	2000	Town of Wickenburg	The Transportation element of the General Plan identifies the general location and extent of existing and proposed major arterials, collector streets and street classifications. It considers multi-modal transportation options including transit, pedestrian and bicycle alternatives.
Highways			
Grand Avenue MIS (I-17 to Loop 101)	1999	Arizona Department of Transportation	With the objective to expedite traffic flows, the report makes recommendations to eliminate all six-legged intersections along Grand Ave using a variety of techniques, mostly grade separations. The plan also provides for some transit and alternative mode accommodations, though they are not a primary focus of the study. Mention is made of the possibility of a future expressway subject to a number of provisos related to row acquisition and elimination of local streets. Cost estimate for the entire program is over \$500 million.
Grand Avenue Study (Loop 101 to Loop 303)	Underway	Arizona Department of Transportation	Project has identified grade separations of various types as possible solutions, but has not yet arrived at a final set of recommendations. There is still discussion about key locations such as Bell Road/Grand and areas that have been introducing new traffic controls.
US 60 – US 93 Wickenburg Realignment Corridor Location Report	1998	Arizona Department of Transportation	This study reviewed opportunities to identify and evaluate possible highway corridors connecting US 60 and US 93 around downtown Wickenburg. Two alignments (one east and one west) were recommended for further study, but none has been selected for implementation.
Roads of Regional Significance Evaluation	January 1996	Maricopa Association of Governments	Included in this evaluation, is the examination of upgrading of regionally significant roadways to accommodate bicycle facilities. This includes the 119 miles of roadways within the Study area that also incorporates the design guidelines to meet the Arizona Bicycle Facilities Planning Design Guidelines.
East-West Mobility Study	Underway	Maricopa Association of Governments	Analysis of opportunities for better or additional improvements in the Northern-Beardsley Corridor from Loop 303 to SR 51
Freeway Bottleneck Study	Underway	Arizona DOT/ Maricopa Association of Governments	Study of freeway bottlenecks and solutions for future funding consideration
Transit			
Peoria Transit Plan	November 2000	City of Peoria	Plan developed to meet objectives for long-range multimodal options in the City. Focus is on dial-a-ride in the short term, with provisions for more fixed route service in the long term.
Surprise Transit Plan	September 2001	City of Surprise	City developed plan to provide for choices. Like Peoria, focus was on expansion of dial-a-ride in short term and fixed route or even high capacity in the long term. Working with RPTA and adjacent cities to set up a circulator to serve specific destinations.
Glendale Transportation Plan	2001	City of Glendale	Plan was develop to address city's transportation needs from bus bays and road widenings to light rail. Served as basis for successful sales tax election in November 2001
Park and Ride Report	January 2001	Maricopa Association of Governments	Study identifies the four existing Park & Ride facilities within the Northwest Valley Study area. Included in this report are the future planned Park & Ride facilities including their respective location, size, and cost and design guidelines to accommodate and encourage the use of transit.

Bicycle/Pedestrian			
Bicycle System Plan	April, 1999	Maricopa Department of Transportation	The plan's regional context applies to the Northwest Valley in that the overall plan recommends that the County double the number of bike lanes within the county, incorporate bicycle facilities in new roadway design and improvements; and to recognize and evaluate bicycle facilities as a viable alternate mode for commuting within the Study Area. Organizational and facility changes to institute these recommendations are also detailed.
Pedestrian Plan 2000 Final Report	December 1999	Maricopa Association of Governments	An update to the MAG 1993 Study, this plan recommends the inclusion of pedestrian facility guidelines into the Maricopa Department of Transportation roadway design guidelines. This includes new roadway construction, as well as retrofitting existing roadways with specific pedestrian-friendly designed facilities to encourage pedestrian activity.
Pedestrian Area Plan Design Guidelines	October 1995	Maricopa Association of Governments	Plan provides a comprehensive plan for the utilization of public/private funds for the installation of pedestrian facilities within the study area. Included are recommended design criteria and placement of facilities and amenities to improve and promote pedestrian activities.
West Valley Rivers Master Plan		Maricopa Association of Governments/Flood Control District of Maricopa County	Sets forth a plan to improve the New and Agua Fria River flood control corridors with bicycle and pedestrian amenities.
Goods Movement			
ITS/CVO Business Plan Study	March, 1998	Arizona DOT	Business plan concentrates on Freeway management system and the variable message signs installed along the study area freeways to improve mobility. Utilizing ITS to improve mobility through effective communication to motorists and motor carriers of roadway travel conditions. Plan also details methods to improve streamlining of motor carrier freight permitting and inspection processes.
Intermodal Management Plan	April, 1995	Maricopa Association of Governments	Plan examined the methodologies in providing area residents choices in transportation modes, and developing ways to expedite the transfer from one mode to another. Specific recommendations in developing public/private partnerships to accommodate the ease of transferring from one mode of travel to another to enhance the social and environmental benefits to maintain and improve the quality of life in the Northwest Valley.
CANAMEX Corridor	August 2000	Arizona DOT	Study addressed the needs of an international corridor for goods transportation through Maricopa County to support increased activity expected as a result of NAFTA. In NWATS, the alignment is along Vulture Mine and Wickenburg Roads between I-10 and US 93.